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Police Perceptions of Overdose Outreach Program Effectiveness

Laurie T. Becker

Master of Science

Criminal Justice

School of Justice Studies

Roger Williams University

October 2020

ROGER WILLIAMS UNIVERSITY
MASTER'S PROGRAM IN CRIMINAL JUSTICE
THESIS PROJECT FORM

Date: April 13, 2020

Approval is given to: Laurie Becker (Student's Name) 1273801 (ID #)

a candidate for degree of Master of Science in CRIMINAL JUSTICE, to conduct the following research project:

Police Perceptions of Overdose Outreach Programs
Title of Research Project

1. **Composition of Master's Thesis Committee:**

Stephanie P. Manzi — Committee Member [Print Name] — Signature — 4/17/2020 — Date
BECK STRAH — Committee Member [Print Name] — Signature — 4/21/2020 — Date
Sean P. Varano — Thesis Chair [Print Name] — Signature — 4/22/2020 — Date

2. **Successful Defense of Master's Thesis Proposal:**

Stephanie P. Manzi — Committee Member [Print Name] — Signature — 6/8/2020 — Date
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Sean P. Varano — Graduate Program Director [Sean Varano] — Signature — 10/29/20 — Date
Eric Bronson — Dean, School of Criminal Justice [Dean Eric Bronson] — Signature — 11/2/2020 — Date

Revised 4/24/10 sv

Dedication

"To mentor is to change a life forever."

This work is dedicated to my mentor – my thesis committee chair, program director, professor, advisor, colleague, and friend. Sean, without your motivation and guidance, this would not have been possible. Your unwavering support and willingness to offer suggestions and advice means the world to me. I truly don't know what I would do without you and our morning chats. No one else shares my love of mornings and listening to me go on and on about this stuff like you do! Words cannot begin to express how thankful I am to learn from you and work with you. I can't think of anyone I would have rather had by my side through this thesis journey and I hope I made you proud with this.

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"It's so essential to surround yourself with individuals who are already where you want to be. Iron shapes iron."

Sean, Stephanie, and Beck – when thinking of who I wanted to serve on my committee, the three of you immediately came to mind as excellent researchers from whom I would be lucky to learn. Thank you so much for seeing the potential in both me and this project, when agreeing to be on my committee. I cannot thank you three enough for the time and dedication you put into this. Your suggestions on how to strengthen my methodology, survey, and analysis were invaluable. Equally important, your caring nature, kind words, positivity, and constant encouragement made me never doubt my ability to complete this project. It was such a pleasure working with the three of you on this, and I cannot wait for future collaborations!

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Abstract

As the number of fatal opioid overdoses rose exponentially, police departments began to realize that traditional, crime control, methods were not working to decrease overdoses. In response, many departments shifted toward a service-centered model of policing, involving overdose outreach visits to encourage treatment to individuals either at-risk of overdosing or having recently experienced a non-fatal overdose. While these programs are increasing, there is little research regarding how police perceive the effectiveness of these programs. Through a survey of officers from Massachusetts, Rhode Island, and Connecticut, this study examines the attitudes police officers hold toward the effectiveness of overdose outreach programs as well as explores which variables serve as significant predictors for these attitudes. Findings show that a large cross-section of officers view overdose outreach programs as effective. Moreover, following multivariate analysis, twelve variables emerged as significant predictors of program effectiveness. Results can be used to inform both theory and practice.

Keywords: police perceptions, attribution theory, service orientation, overdose outreach

Introduction

Since 2000, the number of overdose deaths from opioids has quadrupled to nearly half a million people (Lurigio, Andrus, & Scott, 2018). From 2014 to 2015, deaths due to drug overdose increased 11.4%, accounting for over 50,000 deaths with approximately 30,000 of these involving opioids. The year 2016 continued to see increases in overdose deaths across all demographic lines and geographic locations (Seth, Scholl, Rudd, & Bacon, 2018). In 2017 alone, there were 70,237 fatal overdoses in the United States, making drug overdose the leading cause of injury death in the country. Of these incidents, opioids were involved in 47,600, accounting for over two-thirds of the year's overdose deaths. Broken down, on average, there were nearly 4,000 fatal opioid overdoes per month, over 900 per week, and 130 individuals lost their life each day to an opioid overdose (Centers for Disease Control and Prevention, 2019). Due, in part, to these staggering statistics, in October of 2017, the Department of Health and Human Services formally declared the current opioid epidemic a public health emergency (Johnson & Wagner, 2017).

With law enforcement officers historically fighting on the front lines against illicit drugs, their position in this current epidemic has proven to be no different. Stemming from the War on Drugs and continuing through the beginning of this most recent epidemic, law enforcement agencies had devoted themselves to targeting drug dealers and working tirelessly to get illicit drugs off the street through enforcement methods (Fulkerson, Keena, & Longman, 2016). However, as opioid-related deaths continued to increase, many law enforcement officials began to realize that their traditional responses alone will not solve the problem. In response, agencies have adapted by allocating resources toward working with individuals with substance use

disorder to prevent future use and ultimately, future overdose (Botieri, Allen, Varano, Kelley, & Nevins, 2018).

Given that, in 2017, Massachusetts (National Institute on Drug Abuse, 2019), Rhode Island, and Connecticut were included in the top twenty-five percent of states with the highest rate of fatal opioid overdoses (Centers for Disease Control and Prevention, 2020), law enforcement agencies in different areas throughout the states began to develop initiatives that involved police officers making outreach visits to the homes of those who had recently experienced a non-fatal overdose as well as those who were considered to be at risk of a future overdose. Once developed, these outreach programs served mainly to get those with substance use disorder into treatment, thereby reducing future overdoses and saving lives (Botieri et al, 2018). While overdose outreach programs are gaining popularity throughout these New England states and surrounding areas, there is very little research regarding law enforcement officers' perceptions of these programs. Therefore, this study is exploratory in nature and is aimed at filling this hole in the research by gaining data-driven insight into the attitudes and perceptions that police hold toward the effectiveness of these programs.

Literature Review

Illicit Drugs as "Public Enemy Number One"

In response to the high levels of illicit drug use in the 1960's, President Richard Nixon used his position to declare the abuse of illicit drugs as "public enemy number one" for the those living in the United States (Wood, Werb, Marshall, Montaner, & Kerr, 2009). During his 1971 speech, President Nixon formally commenced the War on Drugs with the goals of reducing both illicit drug use and abuse. In order to meet these goals, the plan was to interdict drugs before they

reached the streets and to incarcerate those who were found to be in violation of the current drug laws, in terms of either selling drugs or possessing drugs (Fulkerson et al, 2016).

At this time, the majority of what citizens heard about drugs and substance users came from official news outlets as well as popular media. With the general consensus following President Nixon's claim that illicit drugs were "public enemy number one," news stations as well as other media outlets followed suit. Eventually, this belief was adopted by the masses (Sirin, 2011).

About ten years later, transitioning into the 1980's, the United States saw a spike in the use of both powder and eventually, crack cocaine (Walker & Mezuk, 2018). From 1982 to 1985 alone, the nation saw 1.6 million new users begin to use cocaine. In the three years following this surge of new users, cocaine-related emergency department visits increased four-fold (Baker, O'Neill, Ginsburg, & Li, 1992). In response to the growing popularity of cocaine use, by the time the 1986 election took place, there had already been over one thousand articles published about this latest epidemic. Around the same time, a wave of violence was seen around the country with an especially substantial increase of gang violence being seen in urban areas. Armed with the notion that illicit drug use was "public enemy number one," despite evidence signaling that drug use was causing an increase in crime, citizens began to attribute this notable rise in crime to the increase of individuals using cocaine, ultimately resulting in public hysteria (Hart, Csete, & Habibi, 2014). In response to public outcries for decreased drug use, then-president, Ronald Reagan, enacted the Anti-Drug Abuse Act of 1986, thereby setting mandatory minimum sentences for illicit drug offenses. Again, this Act was presented as a way to curb drug use, in line with the goals of the overall War on Drugs (Walker & Mezuk, 2018).

Despite its goals to reduce drug use and abuse, neither drug use nor abuse declined as a result of the billions of dollars spent to fund law enforcement's anti-drug efforts (Robinson & Scherlen, 2007). Additionally, as a by-product of these efforts, the incarceration rate grew rapidly, with a significant number of inmates at both the state and federal levels incarcerated for a drug-related offense (Fulkerson et al, 2016). Even for offenders who were not initially sentenced to incarceration for their drug charge, because of the offense being added to their criminal record, they were now at a higher risk for being sentenced to incarceration following a subsequent offense (Pfaff, 2013). In other words, the use of incarceration as a means to reduce drug use and abuse resulted in a rapid growth of the jail and prison populations. In conclusion, although the War on Drugs was highly unsuccessful in reducing drug use or abuse, it was surely successful in influencing the public perception of drugs and those who use them.

Attribution Theory

Developed by Bernard Weiner, attribution theory serves as the basis for understanding attitudes toward individuals' culpability in various situations (Weiner, 1972). Attribution theory states that when people are presented with a situation, they try to determine who is responsible. In other words, in order to create understanding of the situation, people make attributions about its cause and underlying responsibility (Watson, Corrigan, & Ottati, 2004).

Depending on the situation, the cause can either be attributed to forces internal to the person's control or to forces external to the person's control. According to Weiner, if the cause of the situation is attributed to forces that are internal, or within the person's control, the person is considered to be responsible. Once the person is seen as culpable, society moves to punish the person as an offender. On the other hand, if the cause of the situation is attributed to forces that are external, or outside of the person's control, the person is not seen as being responsible. When

a person is not considered responsible for the event, society expresses sympathy for the person. Given this sympathy, helpful behaviors are typically elicited on behalf of members of society (Schmidt & Weiner, 1988).

Therefore, according to attribution theory, the allocation of responsibility influences subsequent behavior exhibited by society (Weiner, 1972). In terms of how deviance and crime are handled, where police officers allocate responsibility in a given situation can greatly affect the situation's outcome (Watson et al, 2004). This can be seen with police officers' dealings with special populations, such as the mentally ill, the homeless, and those with substance use disorder. Years ago, when officers exhibited a primarily crime control model, they tended to find responsibility in offenders despite their mental illness, homelessness, or substance use disorder. However, as the field of law enforcement is moving toward a service-centered approach, officers are beginning to recognize that the responsibility of these offenders is often external due largely to their mental illness, homelessness, or substance use disorder. As a result, when offenders are not considered responsible, officers are less likely to find them deserving of arrest and instead, opt to seek out treatment and other social services aimed at the specific population (Watson et al, 2004).

Service-Centered Policing

Although police officers are considered agents of law enforcement, the majority of their duties do not involve enforcing the law (Robert, Crawford, & Burns, 2013). In recognizing this fact along with the understood need for officers to engage in behaviors outside of their traditional duties, many police departments, including Massachusetts' Cambridge Police Department have moved away from the traditional law enforcement approach in order to become more of social service agencies (Police Executive Research Forum, 2018).

Over the past three decades, the public has seen a number of law enforcement agencies embody this new service-centered approach when working with the mentally ill population in their areas. While the traditional law enforcement approach would lead officers to make arrests, the service-centered approach has led officers to re-think the way they work with this population in order to ensure that they are best serving them (Watson et al, 2004). As time went on, officers once again found themselves working with a population that required them to provide service rather than arrest: the homeless (Police Executive Research Forum, 2018). Most recently, police officers have put this service-centered approach to use with those suffering from substance use disorder (Botieri et al, 2016). As we see methods of policing changing and an increasing number of law enforcement agencies engaging in service-centered behaviors, it is important to understand their attitudes and perceptions of this type of policing.

Police Perceptions of Taking a Service-Centered Approach to Mental Illness

When responding to a scene, police officers often make a distinction between offenders with mental illness and offenders without mental illness. One University of Chicago study showed that officers view individuals with mental illness as being significantly less culpable than individuals without mental illness. Officers also reported feeling more compassion toward those with mental illness. However, their level of compassion varied with the role of the individual in the situation. For example, officers felt the most compassion for a mentally ill individual who was simply in need of assistance than they did for a person with mental illness that also identified as an offender, victim, or witness in the case to which the officer was responding. Based on feelings of compassion, officers were, thus, more willing to help individuals with mental illness than those without. Within the population of mentally ill individuals, officers were most likely to help an individual with mental illness if he or she was in need of assistance than if

he or she was a suspect, victim, or witness in a case. Additionally, officers were more likely to help a mentally ill individual if he or she was a victim than a suspect or witness. Lastly, in terms of willingness to endorse legal coercion to obtain treatment, officers were most likely to obtain treatment for mentally ill individuals. Again, this varied with the role of the individual in the situation. Officers were significantly more likely to obtain treatment for an individual in need of assistance and a suspect than for a victim or witness (Watson et al, 2004).

While the majority of officers agreed that working with the mentally ill is part of a police officer's job, one Canadian study of officer attitudes toward the mentally ill found that without specialized training, most officers felt they would not be able to adequately assist the mentally ill. Despite their willingness to help, officers described being faced with a dilemma when working with the mentally ill. Officers first described the expectation society holds that when a mentally ill individual is acting out, the police should respond and "resolve" the situation. Despite having a social expectation to act, officers noted that in many cases, a crime has not been committed and thus, they do not have any reason to arrest. Additionally, officers recognized that if they were to transport the individual to an emergency department, the visit would unlikely result in treatment. Therefore, while officers felt an obligation to the mentally ill population, they also believed that the public needs protection from them. This leads to a constant balancing act being performed by officers between acting on behalf of the mentally ill and protecting the public (Cotton, 2004).

Additionally, officers' attitudes about their role in helping the mentally ill was not always correlated with their overall attitudes toward mental illness in general. With approximately half of the officers feeling that calls for service regarding mentally ill individuals "take up more than their fair share of time," it was hypothesized that how officers see their role in assisting the

mentally ill may be more of a reflection of the reality of their experiences on the job than of their personal beliefs regarding what should be done for the mentally ill (Cotton, 2004).

Lastly, while the overwhelming majority of officers want to help the mentally ill and believe it is part of their job as a police officer to help this population, eleven percent of officers believed that, as a police officer, they should not be dealing with mentally ill individuals. Similarly, seventeen percent of officers did not perceive the mentally ill as a disadvantaged group that requires any type of special consideration from law enforcement. Given these findings, however, it is difficult for law enforcement agencies or communities to anticipate who these officers may be. In this study in particular, neither age, gender, years of service, rank, education, nor amount of previous contact with individuals with mental illness seemed to predict which officers would not look favorably on working with the mentally ill. Similarly, officers' attitudes toward working with the mentally ill did not seem to vary by the department by which they were employed (Cotton, 2004).

Police Perceptions of Taking a Service-Centered Approach to Homelessness

Research shows while officers mostly agree that homelessness is not necessarily a law enforcement problem, the majority of officers still believe that they have a role to play in this issue. As police officers who work twenty-four hours a day, they are often the first point of contact for homeless individuals. Therefore, officers are in a position where they are able to talk with these individuals, work to build positive relationships, and connect them with any services that may help them. However, officers from the San Diego and Cambridge Police Departments noted that this type of work is not for all officers. They recognize that the outcomes of these interactions are largely based on the officers' perceptions of the homeless and therefore, officers who do outreach work with the homeless are often hand-picked due to their high levels of

compassion and dedication to working with this population (Police Executive Research Forum, 2018).

While there are many officers, as seen specifically with the Vancouver, San Diego, and Cambridge Police Departments, who exhibited positive attitudes toward playing a role in providing services to the homeless, not all officers take this stance. For example, the results of a survey mailed to officers of one-hundred police departments across the United States showed that some officers believed that working with the homeless population is not their responsibility, as police officers. One common reason for this belief that was noted was that officers felt they were already busy with crimes that had taken place and therefore, they saw working with the homeless, who were not the perpetrators or victims of crimes at the moment, as a burden to them (Robert et al, 2013).

Applying a Service-Centered Approach to Substance Use Disorder

After the Department of Health and Human Services formally declared the opioid epidemic a public health emergency (Johnson & Wagner, 2017), public opinion began to shift from seeing drug use as a crime to seeing opioid addiction as a disease. In response, law enforcement agencies across the nation began adjusting to this new view on drug use by problem-solving and developing methods aimed at treating addiction, which is now understood to be the root cause of continued drug use and later, overdose (Botieri et al, 2018).

Police Perceptions of Taking a Service-Centered Approach to Substance Use Disorder

As the current epidemic got underway, many law enforcement officers' duties grew to include employing Naloxone when arriving to the scene of an overdose. As such, a lot of officers were armed with several doses of Naloxone in their cruisers to provide to victims who were overdosing. Examining officers' feelings toward their role in using Naloxone, one survey of one

hundred seventeen officers found that the majority of these officers felt that it was important for them to be trained in the use of Naloxone and that it was more important for them to be on the scene of an overdose to help the victim than to enforce the law. Furthermore, the overwhelming majority of officers agreed that if given the choice, they would want to help someone who was overdosing. Once on scene, most officers reported they would not only help someone who was overdosing, but that they would do whatever was necessary to save someone's life in an overdose situation (Ray, O'Donnell & Kahre, 2015).

A related survey focusing on officer attitudes toward those with substance use disorder found that the majority of officers agreed that, after the initial overdose, police have a role to play in the prevention of further overdoses. The majority of these officers also noted that drug addiction is a disease that should be handled through treatment and support services (Saucier, Zaller, Macmadu, & Green, 2016). Interviews with police officers in Australia also showed that the majority of officers believed drug addiction should be handled with treatment, but these officers felt frustration regarding the shortage of appropriate treatment services in their area. As a result, the majority of these officers supported the idea of officers providing follow-up support services to the addicted individual after completing detoxification treatment (Beyer, Crofts, & Reid, 2002).

Lastly, in terms of working with those with substance use disorder, interviews of officers from Connecticut and Rhode Island found that even though a lot of officers were conflicted between their role of protecting the community and their role of acting as community caretakers, most officers were empathetic to victims of overdose. Furthermore, the majority of officers exhibited a desire to be involved in overdose prevention and saw it as a part of community policing and maintaining overall positive community relations. However, while officers showed

empathy and a willingness to be involved in this work, a significant number of officers noted a difference between working with legitimate users and illegitimate users in which they were more motivated to help those who they viewed as using drugs in a legitimate manner (Green, Zaller, Palacios, Bowman, Ray, Heimer, & Case, 2013).

Summary of Prior Research and the Need for Further Research

Beginning in the early part of the 1970s, the declaration of illicit drugs as "public enemy number one" as well as the methods and legislation of the War on Drugs entrenched society into the belief that drug users were completely responsible for their actions (Wood et al, 2009; Sirin, 2011). As such, police officers responded to these responsible individuals with punitive measures (Fulkerson et al, 2016). As time went on and overdose deaths began to surge (Lurigio et al, 2018; Seth et al, 2018; Centers for Disease Control and Prevention, 2019), it became better understood that addiction was a disease (Botieri et al, 2018; Saucier et al, 2016) and due to this disease, it was extremely difficult for those with substance use disorder to simply stop using drugs. This shift in thinking prompted law enforcement agencies to no longer view those with substance use disorder as being completely responsible for their crimes. As a result, officers applied the service-centered style of policing to their dealings with individuals suffering from addiction (Botieri et al, 2018).

While engaging in service-centered policing as it pertains to those with substance use disorder is relatively new, there is a significant amount of research on officers' perceptions toward using service-centered policing while working with the mentally ill and the homeless (Watson et al, 2004; Cotton, 2004; Police Executive Research Forum, 2018; Robert et al, 2013). Although some of their perceptions were population-specific, others were seen across the populations. For example, with all three populations, officers described a feeling of compassion

toward working with these individuals (Watson et al, 2004; Police Executive Research Forum, 2018; Green et al, 2013). Secondly, the issue of time was brought up by many of the officers working with the mentally ill as well as the homeless. While many of these officers expressed a desire to work with these two populations, they described it as difficult when trying to balance this work with active calls for service (Cotton, 2004; Robert et al, 2013). Lastly, the feeling of having a role to play in assisting these three populations varied among officers. While the majority of officers working with all three populations showed genuine interest in this type of work (Cotton, 2004; Police Executive Research Forum, 2018; Ray et al, 2015), there were officers who felt that engaging with these populations for the purpose of assistance was not part of their job as a police officer (Cotton, 2004); Police Executive Research Forum, 2018; Robert et al, 2013).

In conclusion, while there is not a significant amount of research regarding police officers' perceptions of engaging in service-centered policing to assist those with substance use disorder, there is even less research on officers' perceptions specifically toward overdose outreach programs. Given the increase in these outreach programs, it begs the questions of how officers feel about engaging in these programs and the work they do in relation to these programs. Therefore, in order to gain a better understanding of the perceptions of police officers on this topic, this study will focus on the following research question: What are officers' perceptions of the effectiveness of overdose outreach programs?

The Current Study

In order to gain a better understanding of police perceptions of overdose outreach programs, and specifically, the effectiveness of these programs, surveys were given to officers in

police departments across Massachusetts, Rhode Island, and Connecticut. These three states were purposely chosen due to being significantly impacted by this current opioid epidemic as well as being known to have high levels of participation in overdose outreach programs. More specifically, the outreach programs in these three states are known to follow a similar model. This model consists of a multi-step approach in which the outreach model is put into motion when a call for service comes into the police station regarding an overdose. If the overdose is found to be non-fatal and the victim was taken to the hospital, officers communicate with hospital officials to determine whether or not the victim has entered into treatment. For individuals who have not entered into treatment, officers set up outreach visits within seventy-two hours of the initial overdose. At the time of the visit, a plainclothes officer as well as a recovery coach, or clinician, knock on the door of the victim. If the victim is home, the team sits down with the victim, presents him or her with information on the services available for those with substance use disorder, and tries to encourage the individual to enter into treatment. Additionally, when an individual is thought to be at risk of overdosing but has not yet overdosed, he or she can be referred to the police department. When a referral is received, officers again follow these steps beginning with setting up an outreach visit (Cruz, 2017). Given that police a number of departments across Massachusetts, Rhode Island, and Connecticut follow this model, or a substantially similar model, purposely creating a sample made up of officers from these three states allows for survey questions to be used that largely pertain to all respondents.

Sample

To answer the research question presented, data were collected from police officers working in Massachusetts, Rhode Island, and Connecticut. Ninety police departments out of the combined 428 (21%) across the three states agreed to participate in this study. Surveys were sent

to an approximate total of 4,500 officers. Nine hundred twenty-seven surveys were returned, indicating a 21% response rate. Any surveys that did not have a 100% progress rate, meaning that the respondent did not view all survey questions, were excluded from this sample. Following this, any surveys in which the respondent skipped all demographic questions were excluded as well. A total of 674 surveys were included in the final sample, accounting for approximately 15% of the surveys that were sent out. It is important to note that according to Krejcie and Morgan's table, a population of 4,500 requires a sample size of 354 to be representative (Krejcie & Morgan, 1970). As a result, these 674 surveys are expected to be representative of the population of police officers working in the three states from which they were taken. This breakdown of surveys is presented in Table 1.

Table I. Survey Breakdown

	# of Surveys	**Remaining Surveys**
Total Surveys	927	
Respondent Did Not Consent	7	920
Respondent Only Completed Consent Form	99	821
Respondent Completed 25% of Survey or Less	31	790
Respondent Completed 26 - 50% of Survey	68	722
Respondent Completed 51 - 75% of Survey	34	688
Respondent Completed 76 - 99% of Survey	1	687
Respondent Skipped All Demographic Questions	13	674

While the response rate is notably lower than the acceptable 70% threshold (Bachman & Schutt, 2013), this sample is heterogeneous in a variety of ways. First, in terms of department type, 21% of departments serve cities, while 79% serve towns. These departments serve populations of 3,000 to 108,000 residents and are made up of anywhere between 5 officers and 298 officers. Relatedly, in terms of the police officers themselves, they hold ranks from officer to chief with years served ranging from less than 1 to over 40. Thirty-five percent of officers

identify as command staff and one-third currently have, or have previously had, detective status. Lastly, participating departments are geographically distributed across the three states with 6 out of 6 counties represented in Rhode Island, 13 out of 14 counties represented in Massachusetts, and 6 out of 8 counties represented in Connecticut.

Research Design

Due to the fact that there is very little prior research on this topic, primary data collection was imperative. A two-step process was taken to make the surveys available to respondents.

First, a letter was electronically sent to the chief and second-in-command, such as the deputy chief, captain, or lieutenant, of each of the departments in Massachusetts, Rhode Island, and Connecticut explaining the purpose of this study, the research questions being examined, and the overall goals of the study (see Appendix A). Additionally, it was clearly stated that participation in this study was voluntary and anonymous, and that no department would ever be named or connected to the results of the survey as all results would be discussed in the aggregate. Embedded in this letter was a link to the formal consent form where chiefs, or commanding officers, were able to electronically consent to their department participating in this study. After two weeks, if a signed consent form (see Appendix B) was not received from a department, one follow-up email was sent at that time.

Once a chief or commanding officer completed the consent to participate form for their department, an email was sent asking whomever completed the form to provide a list with the names of all of the department's full-time sworn officers as well as their email addresses. After receiving the contact information for the officers, each officer received a department-wide email that asked for their participation in the study while noting their participation is voluntary, explained the purpose of the study, and ensured that any information provided on the survey

would remain anonymous (see Appendix C). Attached to this email, officers found the link to complete the consent to participate form (see Appendix D) as well as the survey (see Appendix E) through Qualtrics, an online survey software. After the initial email to officers, a series of three weekly follow-up emails were sent in an effort to increase participation.

Survey Design

The survey instrument used for this study was designed specifically to collect data for the purpose of this study. The survey consisted of thirty-four questions organized into nine sections: (1) professional experience with SUDs, or those with substance use disorder (what is the respondent's likelihood of responding to an overdose and what has his or her level of interaction been with SUDs in the past six months); (2) personal experience with SUDs (does the respondent personally know someone suffering from addiction or someone who has overdosed and off the job, has the respondent witnessed someone overdose); (3) working with SUDs (does the respondent believe addiction is a disease and does he or she think drug use is a choice); (4) policing the opioid epidemic (how important of an issue does the respondent consider the opioid epidemic, does the respondent think police are responsible for tasks related to overdose intervention, and what are his or her general views on policing as well as views on policing as they pertain to SUDs); (5) preparedness for outreach (does the respondent have knowledge of resources and knowledge of what to do on an outreach visit); (6) working as part of an outreach team (is the respondent comfortable working with recovery coaches and does he or she believe the use of recovery coaches is beneficial to SUDs); (7) program effectiveness (how effective does the respondent perceive these programs to be, in terms of overdose prevention and in terms of the officer serving as a resource for the SUD); (8) program improvements (compared to the current model employed, does the respondent believe police making outreach visits alone, would

be as effective and does he or she believe recovery coaches making these visits alone would be as effective); and (9) demographics (the respondent's professional demographics, such as years served and rank, as well as his or her personal demographics, such as gender and race).

Table 2. Descriptive Statistics (N = 674)

	Mean	Std. Deviation	Minimum	Maximum
Outcome Variables				
Program Effectiveness	0.00	1.000	-3.54	2.66
Officer Resource Effectiveness	0.00	1.000	-3.65	2.20
Overdose Prevention Effectiveness	0.00	1.000	-2.84	2.58
Explanatory Variables				
SUD Responsibility	0.00	1.000	-2.72	2.69
Police Response to SUDs	0.00	1.000	-4.08	1.84
Crime Control View	0.00	1.000	-3.60	2.05
Service-Centered View	0.00	1.000	-3.95	2.33
Use of Recovery Coaches	0.00	1.000	-4.64	1.88
Prevention Power	2.19	0.733	1.00	4.00
Knowledge of Services	2.90	0.659	1.00	4.00
Knowledge on a Visit	2.58	0.779	1.00	4.00
Adequate Training	2.63	0.706	1.00	4.00
Departmental Expectations	2.42	0.775	1.00	4.00
Working with Recovery Coaches	3.48	1.045	1.00	5.00
Recent Overdose Responses	2.77	1.395	1.00	6.00
Know Someone Suffering from Addiction	0.61	0.489	0.00	1.00
Know Someone Who Has Overdosed	0.60	0.490	0.00	1.00
Opioid Epidemic Importance	2.71	0.558	1.00	3.00
Chief's Opioid Epidemic Importance	2.73	0.560	1.00	3.00
Years Served	2.94	1.203	1.00	5.00
Command Staff	0.35	0.477	0.00	1.00
Detective Status	0.33	0.471	0.00	1.00
Department Size	3.99	1.928	1.00	6.00
Gender	0.90	0.295	0.00	1.00
Race	0.87	0.332	0.00	1.00
Highest Level of Education	1.89	0.770	1.00	3.00

Variables

The dependent variable, *program effectiveness*, was designed to measure police attitudes toward the effectiveness of overdose outreach programs. This variable consists of a five-item factor score. Indicators combined to form this variable include: "Officers connecting the SUD with resources and treatment opportunities is helpful to the SUD," "The conversation the officer has with the SUD has an impact on whether the SUD chooses to enter treatment," "Officers are making a positive difference by engaging in outreach visits," "Police officers are effective agents in overdose prevention," and "Whether or not the SUD enters treatment following the outreach visit, the officer can be a future resource to the SUD." For each of these statements, respondents could choose from 1 = "strongly disagree," 2 = "disagree;" 3 = "agree;" and 4 = "strongly agree." Higher scores represent greater positive perceptions of program effectiveness, while lower scores denote more negative attitudes toward effectiveness. Descriptive statistics for all variables are presented in Table 2.

This scale, along with all other presented scales, was computed using confirmatory factor analysis and, in doing so, Varimax rotation was used to find the best fit for the data. Varimax, known for its high level of utility and consistency (Gannon Cook, 2010), was chosen as a method of rotation as it most clearly represents how the data is correlated with each of the variables by maximizing their shared variance (Allen, 2017). For this scale, the factor analysis resulted in the extraction of one factor (eigenvalue >1.0) with sufficient scale reliability (α = 0.815) Results of the reliability tests and factor analyses for all variables can be found in Table 3.

Table 3. Scale Reliability and Factor Analysis

Scale	Cronbach's Alpha	Eigenvalue	% of Variance
Program Effectiveness	0.815	2.920	58.40%
SUD Responsibility	0.752	2.573	51.50%
Police Response to SUDs	0.726	2.208	55.20%
Crime Control View	0.737	1.952	65.10%
Service-Centered View	0.618	2.080	34.70%
Use of Recovery Coaches	0.875	1.778	88.90%

Using the prior literature as a guide, the independent variables included in this study fall into four categories, including (1) variables related to demographics as well as personal and professional experience with addiction, (2) views on policing, (3) attribution theory, and (4) other variables directly relating to officers' attitudes toward opioid- and opioid outreach program-related concepts.

First, modeled after Saucier et al's (2016) study, there are three variables that relate to personal demographics. *Gender* is a binary variable where 1 = "male" and 0 = "non-male." Due to a lack of variability in this measure, (90% male), *gender* was collapsed. *Race* is also coded binarily where 1 = "Caucasian" and 0 = "non-Caucasian." Similar to *gender*, 87% of respondents identified as Caucasian, resulting in little variability in the measure. *Highest level of education* measures the highest degree attained by a respondent where 1= "below Bachelor's degree," 2 = "Bachelor's degree," and 3 = "Master's degree or higher."

Turning to professional demographics, *years served*, measuring the number of years the respondent worked as a police officer, was transformed from a continuous variable into the following categories: 1 = "under 5," 2 = "5 to 9," 3 = "10 to 19," 4 = "20 to 29," and 5 = "30 or more." Similarly, *department size*, referring to the number of full-time sworn officers employed by the respondent's department, was transformed from a continuous variable into 6 categories:

1 = “under 20,” 2 = “20 to 49,” 3 = “50 to 74,” 4 = “75 to 99,” 5 = “100 to 149,” and 6 = “150 or more.” *Command staff* refers to whether the respondent holds a rank higher than that of “officer” where 1 = “yes” and 0 = “no.” *Detective status* is binary-coded to measure whether the respondent currently serves, or has previously served, as a detective where 1= “yes” and 0 = “no.” While years served was seen in Saucier et al’s (2016) study, the remaining variables in this category were uniquely included in this study in response to the notion that one’s work-related demographics can impact their perceptions of policing those with substance use disorder.

In terms of variables relating to experience, *recent overdose responses* measures the number of times the respondent has been called to the scene of an overdose in the past six months where 1 = “0,” 2 = “1 to 4,” 3 = “5 to 9,” 4 = “10 to 19,” 5 = “20 to 29,” and 6 = “30 or more.” *Know someone suffering from addiction* is a binary variable where 1 = “yes” and 0 = “no.” Similarly, *know someone who has overdosed* is coded binarily where 1 = “yes” and 0 = “no.” These variables were specifically included in response to a limitation of Green et al’s (2013) study in which the authors noted that participants were not specifically asked about the effects of both their professional and personal experiences around addiction. While a number of their participants referenced these effects, the inclusion of these three variables in this study aimed to better understand the effect of these professional and personal experiences systematically and across all respondents.

Second, as described in a variety of previous articles (Fulkerson et al, 2016; Botieri et al, 2018; Watson et al, 2004; Police Executive Research Forum, 2018; and Green et al, 2013), police officers tend to hold one of two views toward policing: the crime control view or the service-centered view. These views impact how officers envision their role in policing and ultimately, the duties in which the officers support (Green et al, 2013). In response, two

variables, *crime control view* and *service-centered view*, were included in this study as a means of measuring the respondent's views on policing. *Crime control view*, a three-item factor score, was designed to measure the respondent's attitudes toward traditional policing in which the officer primarily serves the role of "law enforcer." The indicators reflected in this measure include: "SUDs should be punished for the crime of possession," "All drug laws should be enforced at all times," and "Drug possession should be mainly punished through the criminal justice system." For each of these statements, respondents could choose from 1 = "strongly disagree," 2 = "disagree;" 3 = "agree;" and 4 = "strongly agree." Higher scores signify more favorable attitudes toward the traditional, crime control, model of policing, while lower scores signify less favorable attitudes toward this model. *Service-centered view*, a six-item factor score, was created to measure the respondent's attitudes toward a more innovative approach to policing in which the officer serves as a "community caretaker." The response set for each of these six indicators mirror those in the *crime control view* scale. Higher scores on this scale represent more favorable attitudes toward the innovative, service-centered, model of policing, while lower scores represent less favorable attitudes toward this model. For each scale, the factor analysis resulted in the extraction of one factor. In terms of scale reliability, crime control view yielded a Cronbach's alpha of 0.737, while service-centered view returned a Cronbach's alpha of 0.618 (see Table 3).

Third, *SUD responsibility* and *police response to SUDs* have been utilized to measure attribution theory. According to Weiner (1972), attribution theory is a two-pronged theory. The first prong involves the allocation of responsibility. In terms of this first prong, SUD responsibility, a five-item factor score, was designed to measure the extent to which respondents view addiction as an external force, thereby viewing SUDs as not being responsible for their

drug use. The indicators combined to form this variable include: “SUDs are responsible for their behavior, when on drugs,” “Addiction is a disease,” “Relapse is a failure,” “Continued drug use after becoming addicted is a choice,” and “Using drugs after undergoing treatment is a choice.” For each of the statements presented as part of this scale, with the exception of “Addiction is a disease,” respondents could choose from 1 = “strongly agree,” 2 = “agree;” 3 = “disagree;” and 4 = “strongly disagree.” For “Addiction is a disease,” the response set was reverse coded where 1 = “strongly disagree,” 2 = “disagree;” 3 = “agree;” and 4 = “strongly agree.” Lower scores on this scale signify, to a greater extent, the belief that SUDs are not responsible for their drug use, while higher scores denote belief in SUD responsibility.

The second prong of attribution theory involves how society responds to the individual. In creating a measurement for this second prong, this study focuses specifically on how law enforcement officers respond to individuals with substance use disorder. More specifically, *police response to SUDs*, a four-item factor score, was crafted as a means of measuring how inclined respondents are to offer SUDs treatment and other services. The indicators reflected in this measure include: “I empathize with SUDs,” “Naloxone/Narcan should be used when a SUD overdoses,” “I believe treatment is more beneficial for SUDs than incarceration,” and “I want to help get SUDs into treatment.” For each of these statements, respondents could choose from 1 = “strongly disagree,” 2 = “disagree;” 3 = “agree;” and 4 = “strongly agree.” Higher scores on this scale represent respondents being more inclined to offer SUDs treatment and other services, while lower scores represent a lesser inclination to offer treatment and services. For each of the scales measuring attribution theory, the factor analysis resulted in the extraction of one factor (eigenvalue >1.0). In terms of scale reliability, *SUD responsibility* returned a reliability score of 0.752, while *police response to SUDs* yielded a Cronbach’s alpha of 0.726 (see Table 3).

Fourth, there are eight variables included that specifically pertain to officers' attitudes toward opioid- and opioid outreach program-related concepts. *Use of recovery coaches* is a two-item factor score that was crafted to measure the extent to which respondents believe the use of recovery coaches is beneficial to SUDs. The indicators combined to form this variable include: "Recovery coaches are good role models for SUDs" and "Recovery coaches can help SUDs choose to enter into treatment." For each of these statements, respondents could choose from 1 = "strongly disagree," 2 = "disagree;" 3 = "agree;" and 4 = "strongly agree." Higher scores on this scale signify respondents viewing the use of recovery coaches as more beneficial to SUDs, while lower scores signify viewing the recovery coaches as less beneficial. The factor analysis for this scale resulted in the extraction of one factor (eigenvalue >1.0) with sufficient scale reliability ($\alpha = 0.875$), which can be seen in Table 3.

Similarly, *working with recovery coaches* measures the level of comfort the respondent has in relation to working with recovery coaches for outreach purposes where 1 = "very uncomfortable," 2 = "uncomfortable," 3 = "somewhat comfortable, 4 = "comfortable," and 5 = "very comfortable." Higher scores on this scale signal respondents feel greater comfort when working with recovery coaches, while lower scores show lesser feelings of comfort. While previous studies have not specifically examined police attitudes as they relate to the use of recovery coaches or their comfort working with recovery coaches, Cruz (2017) discusses the integral role that recovery coaches play in the overdose outreach program model. Seeing as through these programs, police will be exposed to the work recovery coaches are engaging in with SUDs as well as work with the coaches themselves, this study uniquely included this aspect in these two variables.

Modeled after Green et al's (2013) study in which respondents reported a need for greater training as well as a lack of knowledge related to conducting overdose outreach visits, there are four included variables related to knowledge and training. For each of these measures, respondents could choose from 1 = "strongly disagree," 2 = "disagree;" 3 = "agree;" and 4 = "strongly agree." *Knowledge of services* measures the level of which the respondent understands the services available to SUDs in his or her area. Higher scores on this scale represent respondents having a more in-depth understanding of the services available to SUDs, while lower scores denote a lesser understanding of services. *Knowledge on a visit* measures the level to which the respondent knows what to do on an outreach visit. Higher scores on this scale signify respondents having a greater understanding of what they should do when conducting an outreach visit, while lower scores represent a lesser understanding. *Adequate training* measures the level to which the respondent believes he or she has received adequate training on working with SUDs. Higher scores on this scale signal a stronger belief that the training the respondent received in relation to working with SUDs was adequate, while lesser scores signal a belief that the training was inadequate. *Departmental expectations* measure the level to which the respondent feels his or her department has clearly stated what is expected of an officer on an outreach visit. Higher scores represent respondents believing their department more clearly stated what is expected, while lower scores denote the belief that departmental expectations were presented with lesser clarity.

Unique to this study are two variables measuring officers' perceptions of opioid epidemic importance. *Opioid epidemic importance,* measuring the level to which the respondent views the opioid epidemic as a pressing issue, was transformed from an ordinal variable into the following categories: 1 = "low," 2 = "moderate," and 3 = "high." C*hief's opioid epidemic importance*,

measuring the level to which the respondent's chief views the opioid epidemic as a pressing issue, was similarly transformed from an ordinal variable into the following categories: 1 = "low," 2 = "moderate," and 3 = "high." For each of these scales, higher scores represent greater feelings of opioid epidemic importance, while lower scores denote perceptions of lesser importance.

Lastly, and also unique to this study, prevention power measures the extent to which the respondent believes police have the power to prevent future overdoses. For this measure, respondents could choose from 1 = "strongly disagree," 2 = "disagree;" 3 = "agree;" and 4 = "strongly agree." Higher scores on this scale signal respondents hold a greater belief that police are able to prevent future overdoses, while lower scores signal a lesser belief in the power of police to prevent future overdoses from occurring.

It is important to note that nearly all variables exhibited at least some missing data. The level of missing data ranged from 0.1%, with 1 missing case, to 4.9% with 33 missing cases. In terms of an acceptable amount of missing data, Schaeffer (1999) found that up to 5% of missing data is inconsequential, while Bennett (2001) concluded that analysis is unlikely to be biased until 10% of the data is missing. While all variables contained missing values under the acceptable threshold of missing data, all missing data was estimated using mean replacement.

Hypotheses

Based on the literature, the following hypothesized relationships were proposed:

Hypothesis 1. There will be a positive relationship between attribution theory and positive perceptions of program effectiveness. Officers whose beliefs are line with attribution theory will view addiction as an external force, not see SUDs as responsible for their drug use, feel sympathy toward SUDs, and will be more likely to support the behaviors of encouraging

treatment and offering services to help SUDs. Therefore, those officers who follow this line of reasoning are expected to hold favorable attitudes toward the effectiveness of overdose outreach programs.

Hypothesis 2. There will be a positive relationship between the service-centered view of policing and positive perceptions of program effectiveness. Officers who hold a service-centered view of policing are more inclined to engage in problem-solving as a means of reducing crime, rather than solely focusing on arrest. It is expected that officers with a service-centered view will be more likely to see overdose outreach programs as effective.

Table 4A. Comparison of Means

	Yes	**No**				
Know Someone Suffering from Addiction*	0.077	-0.119				
Know Someone Who Has Overdosed**	0.099	-0.150				
Command Staff**	0.141	-0.075				
Detective Status**	0.178	-0.088				
	Male	**Non-Male**				
Gender	-0.021	0.197				
	Caucasian	**Non-Caucasian**				
Race	0.015	-0.103				
	Below Bachelor's	**Bachelor's**	**Master's or Higher**			
Highest Level of Education***	-0.164	-0.069	0.349			
	Under 5	**5 to 9**	**10 to 19**	**20 to 29**	**30 or Over**	
Years Served*	-0.160	0.193	-0.099	0.097	-0.004	
	0	**1 to 4**	**5 to 9**	**10 to 19**	**20 to 29**	**30 or More**
Recent Overdose Responses**	0.206	0.094	-0.045	-0.101	-0.214	-0.472
	Under 20	**20 to 49**	**50 to 74**	**75 to 99**	**100 to 149**	**150 or More**
Department Size***	0.262	0.155	0.299	-0.044	0.004	-0.231

*p < 0.05
**p < 0.01
***p < 0.001

Findings

Bivariate Analysis

In terms of bivariate analysis, a comparison of means was conducted for each independent variable with the dependent variable, *program effectiveness.* Analysis of variance (ANOVA) was used to identify variables that had significant ($p < 0.05$) mean differences. Results from the bivariate comparison of means for *program effectiveness* are presented in Table 4. In addition, results from the ANOVA for *program effectiveness* are presented in Table 5.

Results of the bivariate analysis show fifteen independent variables contain significant mean differences in relation to *program effectiveness*. In terms of professional demographics, *years served* was significantly ($p < 0.05$) related to *program effectiveness* with the most positive perceptions of program effectiveness coming from those serving 5 to 9 years ($\bar{x} = 0.193$) followed by 20 to 29 years ($\bar{x} = 0.097$), 30 or more years ($\bar{x} = -0.004$), 10 to 19 years ($\bar{x} = -0.099$), and under 5 years ($\bar{x} = -0.160$). *Command staff* proved to be a significant ($p < 0.01$) predictor of *program effectiveness* with officers identifying as command staff exhibiting more favorable attitudes toward program effectiveness ($\bar{x} = 0.141$) than their non-command staff counterparts ($\bar{x} = -0.08$). Likewise, *detective status* was a significant ($p < 0.01$) predictor with officers who have, or have previously had, detective status showing more positive attitudes toward program effectiveness ($\bar{x} = 0.178$) than those without detective status ($\bar{x} = -0.088$). Finally, in terms of professional demographics, *department size* was significantly ($p < 0.001$) related to *program effectiveness* with the most positive perceptions of program effectiveness belonging to those working in departments with 50 to 74 officers ($\bar{x} = 0.299$) followed by those with under 20 officers ($\bar{x} = 0.262$), 20 to 49 officers ($\bar{x} = 0.155$), 100 to 149 officers ($\bar{x} = 0.004$), 75 to 99 officers ($\bar{x} = -0.043$), and 150 or more officers ($\bar{x} = -0.231$). Additionally, looking at

personal demographics, *highest level of education* was a significant ($p < 0.001$) predictor of *program effectiveness* with the most favorable attitudes of program effectiveness being exhibited by officers who hold a Master's degree or higher ($\bar{x} = 0.349$) followed by those who hold a Bachelor's degree ($\bar{x} = -0.069$) and those who hold a degree below the Bachelor's level ($\bar{x} = -0.164$).

Table 4B. Comparison of Means: Perceptions

	Low	Moderate	High		
Opioid Epidemic Importance***	-1.071	-0.231	0.130		
Chief Opioid Epidemic Importance**	-0.304	-0.207	0.063		
	Strongly Disagree	**Disagree**	**Agree**	**Strongly Agree**	
Prevention Power***	-0.915	-0.017	0.453	0.887	
Knowledge of Services***	-0.657	-0.249	0.026	0.352	
Knowledge on a Visit***	-0.941	-0.127	0.139	0.522	
Adequate Training	-0.290	-0.032	0.005	0.291	
Departmental Expectations***	-0.494	-0.105	0.173	0.450	
	Very Uncomfortable	**Uncomfortable**	**Somewhat Comfortable**	**Comfortable**	**Very Comfortable**
Working with Recovery Coaches***	-0.706	-0.726	-0.180	0.121	0.780

*p < 0.05
**p < 0.01
*** p < 0.001

Prevention power, knowledge of services, *knowledge on a visit*, and *departmental expectations* were all significant ($p < 0.001$) predictors of *program effectiveness* in the positive direction. For each of these variables, as responses increased from strongly disagree to strongly agree as did the means of *program effectiveness*. *Prevention power* ranged from -0.915 (strongly

disagree) to 0.887 (strongly agree). *Knowledge of services* ranged from -0.657 (strongly disagree) to 0.352 (strongly agree). *Knowledge on a visit* ranged from -0.941 (strongly disagree) to 0.522 (strongly agree). *Departmental expectations* ranged from -0.494 (strongly disagree) to 0.450 (strongly agree). Similarly, *opioid epidemic importance* and *chief's opioid epidemic importance* served as significant ($p < 0.001$ and $p < 0.01$, respectively) predictors. These variables saw increasing means of *program effectiveness* as importance level responses increased from low to high. *Opioid epidemic importance* ranged from -1.071 (low) and 0.130 (high). *Chief's opioid epidemic importance* ranged from -0.304 (low) to 0.063 (high).

Working with recovery coaches was significantly ($p < 0.001$) related to program effectiveness with the most positive perceptions of program effectiveness coming from those who are very comfortable working with recovery coaches for outreach purposes ($\bar{x}$ =0.780) followed by those who are comfortable ($\bar{x}$ = 0.121), somewhat comfortable ($\bar{x}$ = -0.180), very uncomfortable ($\bar{x}$ = -0.7058), and uncomfortable ($\bar{x}$ = -0.727). *Know someone suffering from addiction* proved to be a significant ($p < 0.05$) predictor of *program effectiveness*, with officers knowing someone suffering from addiction ($\bar{x}$ = 0.0775) viewing outreach programs as more effective than their counterparts who do not personally know someone suffering from addiction ($\bar{x}$ = -0.1188). Likewise, *know someone who has overdosed* was another significant ($p < 0.01$) predictor with officers who know someone who has overdosed ($\bar{x}$ = 0.099) showing more favorable attitudes than officers who did not personally know someone who had overdosed ($\bar{x}$ = -0.151). The remaining independent variables were not significant ($p > 0.05$) predictors of *program effectiveness*.

Table 5. Analysis of Variance (ANOVA)

Explanatory Variable	F	Sig	Eta Squared
Know Someone Suffering from Addiction	6.255	0.013*	0.009
Know Someone Who Has Overdosed	10.215	0.001**	0.015
Command Staff	7.243	0.007**	0.011
Detective Status	10.762	0.001**	0.016
Gender	2.801	0.095	0.004
Race	1.037	0.309	0.002
Opioid Epidemic Importance	30.228	0.000***	0.083
Chief's Opioid Epidemic Importance	5.142	0.006**	0.015
Highest Level of Education	14.514	0.000***	0.041
Prevention Power	64.160	0.000***	0.223
Knowledge of Services	9.988	0.000***	0.043
Knowledge on a Visit	27.214	0.000***	0.109
Adequate Training	2.609	0.051	0.012
Departmental Expectations	13.405	0.000***	0.057
Working with Recovery Coaches	38.780	0.000***	0.189
Years Served	2.733	0.028**	0.016
Recent Overdose Responses	4.066	0.001**	0.030
Department Size	6.255	0.000***	0.045

Multivariate Analysis

Ordinary Least Squares Regression

Building on results of the bivariate analysis, multivariate analysis was conducted to determine the effects of multiple independent variables on the dependent variable, *program effectiveness*. First, ordinary least squares regression was used as a means of regressing each of the independent variables on the dependent variable to determine which independent variables served as significant predictors of *program effectiveness*, while controlling for all other independent variables in the model (Murray, 2016). It is important to note that in this model, the tolerance levels remained over 0.2 (Weisburd & Britt, 2013) and the variance inflation factors (VIFs) remained well under 5, confirming that there is no multicollinearity between variables within the model (Hair, Anderson, Tatham, & Black, 2013). The full regression model, accounting for 51.5% explained variance, is presented in Table 6.

Table 6. Ordinary Least Squares Regression

Full Model	B (Std. Error)	Beta	Sig	Tolerance (VIF)
(Constant)	-1.709 (0.307)		0.000	
SUD Responsibility	0.072 (0.034)	0.072	0.033*	0.641 (1.559)
Police Response to SUDs	0.172 (0.038)	0.172	0.000***	0.491 (2.036)
Crime Control View	-0.095 (0.032)	-0.095	0.003**	0.693 (1.443)
Service-Centered View	0.163 (0.035)	0.163	0.000***	0.599 (1.670)
Use of Recovery Coaches	0.131 (0.030)	0.131	0.000***	0.800 (1.251)
Prevention Power	0.347 (0.040)	0.255	0.000***	0.843 (1.187)
Knowledge of Services	-0.040 (0.050)	-0.027	0.417	0.672 (1.488)
Knowledge on a Visit	0.076 (0.048)	0.059	0.111	0.522 (1.916)
Adequate Training	-0.099 (0.049)	-0.070	0.043*	0.610 (1.640)
Departmental Expectations	0.133 (0.045)	0.103	0.003**	0.595 (1.681)
Working with Recovery Coaches	0.149 (0.029)	0.155	0.000***	0.767 (1.303)
Responses to Overdose in Past 6 Months	-0.031 (0.021)	-0.043	0.140	0.846 (1.182)
Know Someone Suffering from Addiction	-0.136 (0.065)	-0.067	0.037*	0.713 (1.403)
Know Someone Who Has Overdosed	0.078 (0.065)	0.038	0.234	0.703 (1.422)
Opioid Epidemic Importance	0.121 (0.057)	0.068	0.032*	0.721 (1.387)
Chief's Opioid Epidemic Importance	-0.070 (0.054)	-0.039	0.195	0.797 (1.254)
Years Served	0.008 (0.027)	0.010	0.763	0.664 (1.507)
Command Staff	-0.108 (0.067)	-0.051	0.111	0.698 (1.432)
Detective Status	0.079 (0.065)	0.037	0.226	0.771 (1.297)
Department Size	-0.019 (0.016)	-0.037	0.229	0.772 (1.295)
Gender	0.095 (0.094)	0.028	0.313	0.927 (1.078)
Race	0.092 (0.086)	0.031	0.281	0.893 (1.120)
Highest Level of Education	0.089 (0.039)	0.069	0.022*	0.808 (1.238)
Adjusted R Square	0.515			
Sum of Squares	357.468			
df	23			
Mean Square	15.542			
F Statistic	32.017			
Sig	0.000			

Findings from the model indicate that there are twelve significant ($p < 0.05$) predictors of *program effectiveness*. As hypothesized, in line with attribution theory, both *SUD responsibility* and *police response to SUDs* significantly ($p < 0.05$ and $p < 0.001$, respectively) predict *program effectiveness* in the positive direction. Officers who view addiction as an external force and as a result, do not view SUDs as being responsible for their drug use are more likely to perceive outreach programs as effective. Relatedly, officers who support the concept of police offering SUDs treatment and other services have a greater likelihood of seeing outreach programs as effective. Therefore, officers whose views are more in line with attribution theory are more likely to also hold positive views of program effectiveness.

In terms of views on policing, the *crime control view* is significant ($p < 0.01$) in its negative prediction of *program effectiveness*, while the *service-centered view*'s significance ($p < 0.001$) lies in its positive prediction. Officers who view the role of the police as being primarily that of a "law enforcer" are less likely to view outreach programs as effective. On the other hand, officers who support police serving as "community caretakers" are more likely to see these programs as effective. This is consistent with the hypothesis of the service-centered view serving as a positive predictor of *program effectiveness*.

Related to recovery coaches, both *use of recovery coaches* and *working with recovery coaches* are significant ($p < 0.001$) predictors of *program effectiveness*. Officers who believe the use of recovery coaches is beneficial to SUDs have a greater likelihood of perceiving outreach programs as effective. Additionally, the more comfortable officers are working with recovery coaches for outreach purposes, the greater likelihood they have of viewing these programs as effective.

In terms of working with SUDs and conducting outreach visits, *departmental expectations* and *adequate training* both proved to be significant ($p < 0.01$ and $p < 0.05$, respectively) predictors. While the significance of *departmental expectations* lies in its ability to positively predict *program effectiveness*, *adequate training*'s significance lies in the negative prediction of *program effectiveness*. Officers who feel their department has clearly stated what is expected of an officer on an outreach visit are more likely to view these programs as effective. On the other hand, officers who believe they have received adequate training in regard to working with SUDs are less likely to view outreach programs as effective.

Looking at officer beliefs related to policing the opioid epidemic, both *opioid epidemic importance* and *prevention power* significantly ($p < 0.05$ and $p < 0.001$) predict *program effectiveness* in the positive direction. Officers who view the opioid epidemic to be a highly pressing issue are more likely to perceive outreach programs as effective. Likewise, officers who believe police have the power to prevent future overdoses are more likely to hold positive views of *program effectiveness*.

Lastly, both *know someone suffering from addiction* and *highest level of education* proved to be significant ($p < 0.05$) predictors of perceptions of *program effectiveness*. While *know someone suffering from addiction* was significant in its negative prediction of *program effectiveness*, the significance of *highest level of education* lies in its ability to positively predict *program effectiveness*. Officers who personally know someone suffering from addiction are less likely to view these programs as effective. On the other hand, officers who hold a Master's degree or higher are more likely to see outreach programs as effective.

Stepwise Regression

Lastly, in terms of analysis, a stepwise approach to ordinary least squares regression was taken as a means of examining the individual effects of the independent variables after being placed in groups (Fox, 1991). In doing so, the twenty-three independent variables were placed into four groups. Model 1 consists of professional and personal demographic variables as well as variables related to professional and personal experience with addiction. Model 2 steps in variables relating to views on policing. Model 3 steps in variables relating to attribution theory. Lastly, Model 4 further steps in variables that specifically pertain to attitudes toward opioid- and opioid outreach program-related concepts. The stepwise regression table is presented in Table 7.

Findings from Model 1 show five significant ($p < 0.05$) predictors of *program effectiveness*, including *detective status*, *department size*, *highest level of education*, *recent overdose responses*, and *know someone who has overdosed*. *Detective status*, *highest level of education*, and *know someone who has overdosed* are significant ($p < 0.05$, $p < 0.01$, and $p < 0.05$, respectively) predictors of *program effectiveness* in the positive direction. Detectives, those with higher level degrees, and those who personally know someone who has overdosed express more favorable attitudes toward program effectiveness. *Department size* and *recent overdose responses* are both significant ($p < 0.01$) predictors in the negative direction. Officers working in smaller departments are more likely to see outreach programs as effective, as are those who have responded to fewer overdoses in the past six months. Neither *gender*, *race*, *years served*, nor *command staff* proved to be significant ($p > 0.05$) predictors in this model. In terms of explained variance, Model 1 accounts for 8% of explained variance.

Table 7. Stepwise Regression

	Model 1		Model 2		Model 3		Model 4	
	b (Std Error)	Beta	b (Std Error)	Beta	b (Std Error)	Beta	b (Std Error)	Beta
(Constant)	0.345 (0.244)		-0.046 (0.210)		-0.062 (0.199)		-1.709 (0.307)	
Years Served	-0.063 (0.037)	-0.076	-0.004 (0.032)	-0.005	-0.013 (0.030)	-0.015	0.008 (0.027)	0.010
Command Staff	0.073 (0.092)	0.035	-0.056 (0.079)	-0.027	-0.074 (0.074)	-0.035	-0.108 (0.067)	-0.051
Detective Status	0.182 (0.088)	0.086*	0.120 (0.075)	0.056	0.124 (0.072)	0.058	0.079 (0.065)	0.037
Department Size	-0.069 (0.021)	-0.133**	-0.033 (0.018)	-0.064	-0.023 (0.017)	-0.044	-0.019 (0.016)	-0.037
Gender	-0.133 (0.128)	-0.039	0.052 (0.110)	0.015	0.062 (0.104)	0.018	0.095 (0.094)	0.028
Race	-0.090 (0.117)	-0.030	-0.001 (0.100)	0.000	0.048 (0.094)	0.016	0.092 (0.086)	0.031
Highest Level of Education	0.162 (0.053)	0.125**	0.114 (0.045)	0.088*	0.091 (0.043)	0.070*	0.089 (0.039)	0.069*
Recent Overdose Responses	-0.078 (0.028)	-0.108**	-0.036 (0.024)	-0.051	-0.028 (0.023)	-0.039	-0.031 (0.021)	-0.043
Know Someone Suffering from Addiction	0.044 (0.088)	0.022	-0.076 (0.076)	-0.037	-0.143 (0.072)	-0.070*	-0.136 (0.065)	-0.067*
Know Someone Who Has Overdosed	0.185 (0.088)	0.091*	0.090 (0.076)	0.044	0.117 (0.072)	0.057	0.078 (0.065)	0.038
Crime Control View			-0.265 (0.032)	-0.265***	-0.142 (0.035)	-0.142***	-0.095 (0.032)	-0.095*
Service-Centered View			0.441 (0.033)	0.441***	0.279 (0.036)	0.279***	0.163 (0.035)	0.163***
SUD Responsibility					0.061 (0.037)	0.061	0.072 (0.034)	0.072*
Police Response to SUDs					0.325 (0.039)	0.325*	0.172 (0.038)	0.172***
Use of Recovery Coaches							0.131 (0.030)	0.131***
Prevention Power							0.347 (0.040)	0.255***
Knowledge of Services							-0.040 (0.050)	-0.027
Knowledge on a Visit							0.076 (0.048)	0.059
Adequate Training							-0.099 (0.049)	-0.07*
Departmental Expectations							0.133 (0.045)	0.103*
Working with Recovery Coaches							0.149 (0.029)	0.155***
Opioid Epidemic Importance							0.121 (0.057)	0.068*
Chief's Opioid Epidemic Importance							-0.070 (0.054)	-0.039
Mean Square	6.312		19.192		19.998		15.542	
F Statistic	6.862		28.656		33.530		32.017	
Sig	0.000		0.000		0.000		0.000	
Adj R-Square	0.080		0.330		0.404		0.515	

Model 2 steps in additional variables relating to views on policing, including the *crime control view* and *service-centered view*. Findings from Model 2 indicate two additional significant predictors of *program effectiveness*. *Crime control view* is a significant ($p < 0.001$) predictor in the negative direction, while *service-centered view* is a significant ($p < 0.001$) predictor in the positive direction. More specifically, officers who hold the crime control view of policing hold less favorable views of outreach program effectiveness. On the other hand, officers who hold a service-centered view toward policing express more favorable attitudes toward program effectiveness. Looking at the significance of previous variables, once this group of variables was stepped in, *detective status*, *recent responses to overdoses*, and *know someone who has overdosed* are no longer significant ($p > 0.05$). In terms of explained variance, Model 2 explains 25% of the variance. Combined Models 1 and 2 account for a total of 33% explained variance.

Model 3 further steps in variables relating to attribution theory, including *SUD responsibility* and *police response to SUDs*. Findings from Model 3 show the addition of two significant predictors of *program effectiveness*. *Police response to SUDs*, one of the new variables stepped into Model 3, is a significant ($p < 0.05$) predictor in the positive direction. Officers who are more inclined to offer SUDs treatment and other services show more favorable attitudes toward program effectiveness. Additionally, *know someone suffering from addiction*, a variable originally included as part of Model 1, emerged as significant ($p < 0.05$), as this third group of variables was stepped in. *Know someone suffering from addiction* was a significant predictor in the negative direction. Officers who personally know someone suffering from addiction are less likely to show favorable attitudes toward program effectiveness. Looking back at previous variables, with the addition of these two variables relating to attribution theory,

department size no longer remained significant ($p > 0.05$). In terms of explained variance, Model 3 accounts for 7.4% explained variance. Combining the models up to this point, 40.4% of the variance is explained.

Lastly, Model 4 steps in variables that specifically pertain to attitudes toward opioid- and opioid outreach program-related concepts, including *use of recovery coaches*, *knowledge of services*, *knowledge on a visit*, *adequate training*, *departmental expectations*, *prevention power*, *working with recovery coaches*, *opioid epidemic importance*, and *chief's opioid epidemic importance*. Findings from Model 4 indicate seven additional significant predictors of *program effectiveness*. *SUD responsibility* ($p < 0.05$), *use of recovery coaches* ($p < 0.001$), *departmental expectations* ($p < 0.05$), *working with recovery coaches* ($p < 0.001$), *opioid epidemic importance* ($p < 0.05$), and *prevention power* ($p < 0.001$) are all significant positive predictors, while *adequate training* ($p < 0.05$) serves as a negative predictor of *program effectiveness*. Officers who view addiction as a disease and do not view SUDs as being responsible for their drug use exhibit more favorable attitudes toward the effectiveness of outreach programs.

Similarly, officers who believe the use of recovery coaches is beneficial to SUDs, feel his or her department has clearly stated what is expected of an officer on an outreach visit, exhibit a high level of comfort working with recovery coaches, consider the opioid epidemic to be a pressing issue, and believe police have the power to prevent future overdoses are more likely to hold more favorable attitudes of program effectiveness. Additionally, officers who do not believe they have received adequate training show a greater likelihood of exhibiting favorable attitudes of program effectiveness. Looking at the significance of previous variables, once this final group of variables was stepped in, all variables showing significance ($p < 0.05$) in Model 3 continued to

remain significant ($p < 0.05$) in Model 4. In terms of explained variance, Model 4 accounts for an additional 11.1% of variance. Combined, these four models explain 51.5% of the variance.

Discussion

The current study was designed to ascertain police perceptions of overdose outreach program effectiveness. Moreover, this study sought to describe which variables predict police exhibiting favorable attitudes toward the effectiveness of these programs. Findings support that a large cross-section of officers hold positive perceptions of the effectiveness of overdose outreach programs.

Results of the bivariate comparison of means show fifteen independent variables contain significant mean differences in terms of *program effectiveness*. Related to demographics, *highest level of education*, *years served*, *command staff*, *detective status*, and *department size* are significant predictors of *program effectiveness*. More specifically, the most favorable attitudes toward program effectiveness are exhibited by officers who hold at least a Master's degree, have served as a police officer between five and nine years, identify as command staff, currently have, or have previously had, detective status, and work in a department with between 50 and 74 officers. Additionally, *prevention power*, *knowledge of services*, *knowledge on a visit*, and *departmental expectations* are all significant predictors of *program effectiveness* in the positive direction with officers who strongly agree with these predictors holding the most favorable views of *program effectiveness*. Related to *opioid epidemic importance*, officers who believe the opioid epidemic is of a high level of importance as well as officers who perceive their chief as believing the opioid epidemic is of a high level of importance see outreach programs as being most effective. Lastly, *working with recovery coaches*, *know someone suffering from addiction*, and

know someone who has overdosed are significant in the positive direction with officers who are very comfortable working with recovery coaches, know someone suffering from addiction, and know someone who has overdosed displaying the most positive perceptions of outreach program effectiveness.

Moving to multivariate analysis, results of the ordinary least squares regression indicated the presence of twelve significant predictors of *program effectiveness*. Consistent with attribution theory, officers who view individuals as not being responsible are more likely to support the assisting of these individuals. This is apparent through both *SUD responsibility* and *police response to SUDs* emerging as positive predictors of police holding favorable attitudes toward the effectiveness of outreach programs meant to assist individuals suffering from addiction.

Consonant with the aforementioned research, officers who hold a service-centered view of policing display more favorable attitudes toward program effectiveness than their crime control view-holding counterparts. Additionally, in relation to recovery coaches, both officers who support the use of recovery coaches working with SUDs as well as those who are comfortable working with recovery coaches for the purpose of outreach are significantly more likely to view outreach programs as effective. Also, in line with previous research, *departmental expectations* and *adequate training* are both significant predictors in the positive and negative directions, respectively. Cotton (2004) found that without specialized training officers did not believe they would be able to effectively work with the mentally ill population. Additionally, Ray et al (2015) found that the majority of officers supported the use of training in regard to Naloxone. Therefore, the results of this study further show that officers support training on working with SUDs and believe that having a clear understanding of what to do when working with a given population helps them to better serve that population. Additionally, *opioid epidemic*

importance also proved to be a significant predictor. This relates to the study conducted by the Police Executive Research Forum in 2018 that concluded the outcomes of interactions between police and the homeless were largely based on the officer's own perceptions of the homeless. Further connecting to the previous research, Cotton (2004) did not find any demographic variables that predicted which officers support working with the mentally ill population. As such, this study concluded that it was extremely difficult for police departments to anticipate which officers would hold favorable opinions toward this type of work. Similarly, in examining a variety of demographic variables in this study, only *highest level of education* emerged as a significant predictor of *program effectiveness*. Lastly, building off of one of the limitations of Green et al's (2013) study, officers were asked whether they personally knew someone who was suffering from addiction. This served as a significant negative predictor as officers who personally knew someone suffering from addiction held less favorable attitudes toward the effectiveness of outreach programs.

Unique to this study, *prevention power*, *use of recovery coaches*, and *working with recovery coaches* all served as significant positive predictors of *program effectiveness*. As such, officers who believe police have the power to prevent future overdoses, believe recovery coaches are beneficial for SUDs, and are comfortable working with recovery coaches show the most favorable opinions toward overdose outreach *program effectiveness*.

Finally, looking at the results of the stepwise regression, the full regression model explains 51.5% of variance. Using the stepwise approach, this explained variance is split over four models. Model 1, accounting for all demographic data as well as variables pertaining to professional and personal experience with addiction, explains 8% of the variance. Model 2, stepping in the two views of policing, explains an additional 25% of the variance for a total of

33% explained variance. Model 3, further stepping variables related to attribution theory, explains an additional 7.4% of the variance for a cumulative 40.4% of variance explained. Model 4, lastly stepping in all other independent variables related to policing the opioid epidemic and specifically related to the use of overdose outreach programs, explains the final 11.1% of the variance for a combined total of 51.5% explained variance. From these results, it is clear that the majority of variance is explained in Model 2 with the officer's views on policing. While Model 3 explains the least amount of variance, this model only contains *SUD responsibility* and *police response to SUDs*, which signals that these variables combined account for a substantial amount of explained variance.

The results of this study have a variety of implications: both theoretical and practical. First, in terms of theoretical implications, both *SUD responsibility* and *police response to SUDs* being significant predictors of *program effectiveness* signal that attribution theory applies to how police view individuals with substance use disorder. Starting with the War on Drugs and continuing through the beginning of this current epidemic, officers viewed drug use as a criminal justice issue. When police came into contact with individuals found to be in possession of drugs, drug use was viewed as an internal force. In other words, drug use was seen to be within a person's control. The belief was that people were consciously making the decision to use drugs. As a result of this mindset, those found in possession of drugs were seen as responsible for their behavior and were punished as they would be for a variety of other crimes. In the same vein, it was assumed that individuals could stop using drugs just like they could stop committing other types of crime. When these individuals continued to violate the drug laws by possessing drugs, officers engaged in punitive measures in an effort to stop this behavior.

As public perceptions around drug use shifted, as did police perceptions. Toward the end of 2017, following the declaration of the current opioid epidemic a public health emergency (Johnson & Wagner, 2017), drug use began to be viewed as less of a criminal justice issue and more of a public health issue. Around this time, it also became better understood that continued drug use was not often a result of individuals exhibiting a true desire to continue using. Instead, it was quite often the result of addiction. Understanding that those who were addicted to drugs could not simply stop using, police became less likely to view offenders as responsible for their continued drug use. Recognizing now that addiction is an external force that is out of the person's control, officers feel sympathy toward those addicted. Understanding that in order to stop using, individuals needed to engage in treatment, officers report wanting to exhibit helpful behaviors toward SUDs by encouraging them to get into treatment and offering them related services.

Seeing that police perceptions in relation to working with SUDs is in line with attribution theory, in order for police to view overdose outreach programs as effective, they should first view addiction as an external force. Once they view addiction as an external force, police will not see SUDs as responsible for their drug use, will feel sympathy toward SUDs, and will be more likely to encourage treatment and offer other services to help SUDs.

Second, in terms of practical implications, it is clear from the results that those who view addiction as an external force, those with more innovative and service-centered views on policing, those who view the opioid epidemic as highly important, those who believe police can prevent future overdoses, those who feel their department has laid out clear expectations of their officers in relation to the task of outreach, those who see value in recovery coaches working with

SUDs, and those who are comfortable working with recovery coaches are significantly more likely to find overdose outreach programs to be effective.

In order to increase the likelihood of officers viewing these programs as effective, a critical first step is to increase the support, or "buy in," of these related concepts. As one's view on policing largely shapes his or her views on various aspects of the profession, there is a need to increase exposure of innovative policing ideals, such as police engaging in service-related behaviors, in an effort to encourage the adoption of this service-centered view on policing. Additionally, specific to policing the opioid epidemic, trainings related to overdose outreach programs can help to increase officers' feelings of importance of the opioid epidemic, can increase officer understanding of what outreach entails and what is expected of officers conducting outreach visits, and can provide an in-depth description of the use of recovery coaches and how they can be of benefit to both SUDs and police alike. Since the power to prevent future overdoses is a significant positive predictor of more favorable attitudes toward program effectiveness, incorporating success stories of individuals who were positively impacted by an outreach visit and have since engaged in treatment and stopped using drugs into these trainings may help to make officers believe that they have the power to influence whether an individual stops using drugs and ultimately, whether he or she experiences future overdoses. In relation to trainings, it is also important to note that officers who held the most positive views of program effectiveness did not believe that they had received adequate training on working with SUDs. Therefore, even in terms of officers who see these programs as effective, there is still a need for greater training.

Lastly, it can be seen that as one's level of education increases as does his or her likelihood of seeing outreach programs as effective. Therefore, incentivizing the attainment of

college degrees can increase the number of officers in a department who hold favorable attitudes toward the effectiveness of these programs. While after these efforts, there will undoubtedly still be officers who do not see these programs as effective, it is suggested that increasing values, or support, of these predictors will help to also increase support of overdose outreach programs.

Limitations

There are two limitations to this study that should be taken into consideration when evaluating its conclusions. First, this study may have been subject to selection bias. During the recruitment phase, chiefs or commanding officers were given the choice for their department to participate in this study. Secondly, following departmental approval, officers were then, individually, given the choice on whether or not to participate. With this recruitment strategy, there is the potential for those who chose to participate sharing a characteristic that differs from those who did not participate. This difference may be at the organization level, between agencies, or at the individual level between officers. Second, this study solely focuses on the perceptions of officers working in three New England states. New England is known to have been impacted greater, in terms of fatal opioid overdose rates, than other areas of the nation. Additionally, this impact was felt much earlier than in these other areas. Aside from policing the opioid epidemic, it is unknown if there is something unique to policing in New England that could impact the generalizability of these perceptions outside of this area. For these reasons, this study may not be generalizable outside of New England.

Conclusion

In conclusion, the purpose of this study was to determine police perceptions of overdose outreach program effectiveness. From the findings, it is clear that police tend to hold positive perceptions of these programs in terms of their effectiveness. This said, these positive

perceptions are held by a large cross-section of officers. It is also clear that there are a variety of variables that both positively and negatively predict how officers will view program effectiveness. What, however, is not as clear is what police believe could be improved upon with these programs. With this in mind, scholars are encouraged to build upon this research by further examining the attitudes of officers who do not view outreach programs as effective and what these officers believe could be changed in order for these programs to be more effective. In addition, with the above limitations in mind, scholars are encouraged to continue this research by completing a similar study with officers outside of New England to determine whether the perceptions presented in this study hold true across geographic areas.

Appendix A: Recruitment Letter for Police Departments

May 26, 2020

My name is Laurie Becker and I am a graduate student studying criminal justice in the School of Justice Studies at Roger Williams University. I am writing to you today to ask for your department's participation in a study that focuses on understanding the attitudes and perceptions of police officers toward the use of overdose outreach programs as well as the overall changing strategies related to overdose prevention and intervention. This study consists of an online survey that will take approximately 10 minutes to complete.

With over one hundred individuals losing their lives each day to opioid overdoses across the nation, I am sure you have noticed this current opioid epidemic is having an impact on the way law enforcement agencies operate. However, although many departments are taking a more proactive, hands-on approach to policing the opioid epidemic, little is known about how police officers feel about this new approach. Specifically, this study aims to answer the following questions:

1) What are the motivations for officers to engage in overdose outreach programs?
2) What are officers' perceptions of overdose outreach programs?
3) What are officers' perceptions of the work they do related to overdose outreach programs?
4) If anything, what do officers feel could be better about overdose outreach programs?

Again, this study has been designed to include a 10-minute online survey that will be emailed to all officers within your department. It will then be up to each officer if he or she chooses to voluntarily participate in the study. All answers provided by officers will remain anonymous and no officer's name nor your department name will ever be linked to any information that is made public.

Your department's participation in this study is greatly appreciated as it will undoubtedly help to fill a hole in the national conversation regarding the topic of policing the opioid epidemic. I look forward to gaining valuable insight into this topic through your responses.

If you have any questions, please do not hesitate to contact the principal investigators, Dr. Sean Varano at svarano@rwu.edu or myself at lbecker017@g.rwu.edu.

Sincerely,

Laurie Becker
MSCJ Graduate Student
Roger Williams University
School of Justice Studies

Appendix B: Departmental Consent to Participate Form

Consent to Participate
Police Perceptions of Overdose Outreach Programs

You are being asked to allow the officers in your department to participate in a research study on opioid overdose outreach programs, which many police departments are using as a strategy to curb opioid use and ultimately, opioid-related deaths. Please read this form carefully before agreeing that your department may participate in this study.

What this study is about: The purpose of this study is to gain an understanding of the attitudes of police officers toward overdose outreach programs as well as their own professional engagement in these programs.

What officers will be asked to do: Officers will be asked to complete the survey as accurately and honestly as possible. The survey will take approximately 10 minutes to complete. Officers are asked to follow the enclosed link that will bring them to the survey where they will be able to fill it out and submit it completely online.

Benefits and Risks: An anticipated benefit of your department's participation is helping to fill a hole in the national conversation regarding what police officers think of the overdose outreach programs that police departments all over the country are adopting. There are no anticipated risks of participating in this study.

Protections: These surveys are anonymous. Any information officers provide in this survey will be kept private. In any report made public, all information will be discussed in the aggregate and no officer nor his or her department will ever be linked to any information made public. Furthermore, all records of this survey will be kept in a password-protected computer of which only the principal investigators will have access.

Voluntary Participation: Participating in this study is completely voluntary. Officers may skip any questions that they do not want to answer, and they are free to withdraw at any time.

If you have any questions regarding this study, please do not hesitate to contact the principal investigators, Dr. Sean Varano at svarano@rwu.edu or Laurie Becker at lbecker017@g.rwu.edu. Similarly, if you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board at (401) 254-5738.

Statement of Consent: I have read the above information and I am giving consent for officers in my department to participate in this study. By giving consent, I am also agreeing that no further action will be taken by the police department as a result of any answers provided by officers for the purpose of this study.

_____	_____	_____
Printed Name	Signature	Date

Appendix C: Recruitment Letter for Individual Officers

May 26, 2020

My name is Laurie Becker and I am a graduate student studying criminal justice in the School of Justice Studies at Roger Williams University. I am writing to you today to ask for your participation in a study that focuses on understanding the attitudes and perceptions of police officers toward the use of overdose outreach programs as well as the overall changing strategies related to overdose prevention and intervention. This study consists of an online survey that will take approximately 10 minutes to complete.

With over one hundred individuals losing their lives each day to opioid overdoses across the nation, I am sure you have noticed this current opioid epidemic is having an impact on the way law enforcement agencies operate. However, although many departments are taking a more proactive, hands-on approach to policing the opioid epidemic, little is known about how police officers feel about this new approach.

Therefore, your participation in this study is greatly appreciated as it will help to fill this hole in the national conversation regarding the topic of policing the opioid epidemic. Again, this survey should take you approximately 10 minutes to complete and **all information you provide is completely anonymous.**

I look forward to gaining valuable insight into this topic through your responses. If you have any questions, please do not hesitate to contact the principal investigators, Dr. Sean Varano at svarano@rwu.edu or myself at lbecker017@g.rwu.edu.

Sincerely,

Laurie Becker
MSCJ Graduate Student
Roger Williams University
School of Justice Studies

Appendix D: Individual Officer Consent to Participate Form

Consent to Participate
Police Perceptions of Overdose Outreach Programs

You are being asked to participate in a research study on opioid overdose outreach programs, which many police departments are using as a strategy to curb opioid use and ultimately, opioid-related deaths. Please read this form carefully before agreeing to participate in this study.

What this study is about: The purpose of this study is to gain an understanding of the attitudes of police officers toward overdose outreach programs as well as their own professional engagement in these programs.

What you will be asked to do: You are being asked to complete the attached survey as accurately and honestly as possible. This survey will take approximately 10 minutes to complete. You are asked to follow the enclosed link that will bring you to the survey where you may fill it out and submit it completely online.

Benefits and Risks: An anticipated benefit of your participation is helping to fill a hole in the national conversation regarding what police officers think of the overdose outreach programs that police departments all over the country are adopting. There are no anticipated risks of participating in this study.

Protections: These surveys are anonymous. Any information you provide in this survey will be kept private. In any report made public, all information will be discussed in the aggregate and no officer nor his or her department will ever be linked to any information made public. Furthermore, all records of this survey will be kept in a password-protected computer of which only the principal investigators will have access.

Voluntary Participation: Participating in this study is completely voluntary. You may skip any questions that you do not want to answer, and you are free to withdraw at any time.

If you have any questions regarding this study, please do not hesitate to contact the principal investigators, Dr. Sean Varano at svarano@rwu.edu or Laurie Becker at lbecker017@g.rwu.edu. Similarly, if you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board at (401) 254-5738.

Statement of Consent: I have read the above information and I consent to participate in this study. I understand that if I change my mind, I can withdraw from the study at any time, without any penalty or consequences.

I Agree	I Disagree

Appendix E: Overdose Outreach Program Survey

Overdose Outreach Program Survey

Instructions: Please take a few minutes to complete this survey. The information you provide will give researchers a better understanding of police perceptions toward overdose outreach programs. As a reminder, completing this survey is voluntary and all information provided will be confidential. Thank you for your willingness to complete this survey!

Please Note: Everywhere the term "SUD" is mentioned, it is referring to an individual with substance use disorder.

Part I. Professional Experience with SUDs

1. On a typical shift, what is your likelihood of responding to an overdose? *(circle one)*

Very Unlikely Unlikely Somewhat Likely Likely Very Likely

2. Put an "X" in the box that corresponds with the number of times you have completed the following activities over the past 6 months.

Over the past 6 months, how many times have you…	0	1 to 4	5 to 9	10 to 19	20 to 29	30 or more
A. responded to the scene of an overdose?						
B. arrested someone for being in possession of drugs?						
C. avoided arresting someone in favor of getting him or her treatment?						
D. helped someone get access to treatment?						
E. conducted a post-overdose follow-up visit?						
F. given someone Naloxone/ Narcan?						
G. witnessed someone receive Naloxone/Narcan?						

Part II. Personal Experience with SUDs

3. Do you personally know someone suffering from addiction? *(check one)* __ Yes __ No
   If yes, *check all* that apply: __ Acquaintance __ Friend __ Family Member

4. Do you personally know someone who has overdosed? *(check one)* __ Yes __ No
   If yes, *check all* that apply: __ Acquaintance __ Friend __ Family Member

5. Off the job, have you witnessed someone overdose? *(check one)* __ Yes __ No
   If yes, *check all* that apply: __ Acquaintance __ Friend __ Family Member

Part III. Working with SUDs

6. To what extent do you agree or disagree with the following statements *(Put an "X" in the box that describes how you feel)*

	Strongly Disagree	Disagree	Agree	Strongly Agree
A. Using drugs for the first time is a choice.				
B. SUDs are responsible for their behavior, when on drugs.				
C. SUDs should be punished for the crime of possession.				
D. Addiction is a disease.				
E. If SUDs truly engage in treatment, it will work the first time.				
F. I want to help get SUDs into treatment.				
G. I empathize with SUDs.				
H. Relapse is a failure.				
I. Continued drug use after becoming addicted is a choice.				
J. Using drugs after undergoing treatment is a choice.				
K. Naloxone/Narcan should be used when a SUD overdoses.				
M. There is no difference between those who abuse prescription drugs and those who abuse illicit street drugs.				
N. I get frustrated when I cannot encourage a SUD to enter treatment.				
O. Those who abuse street drugs should be punished harsher than those who abuse prescription drugs.				
P. I believe treatment is more beneficial for SUDs than incarceration.				

Part IV. Policing the Opioid Epidemic

7. On a scale of 0-10 (with 0 being the lowest and 10 being the highest), to what extent do the following individuals consider the opioid epidemic to be a pressing issue?

___You
___Other officers in your department
___Command staff in your department
___Your chief
___City/town officials
___Community members

8. Do police have a responsibility to engage in the following activities? *(circle "yes" or "no")*

A. Engaging in pre-overdose prevention for those at-risk of overdosing Yes No
B. Responding to a current overdose Yes No
C. Encouraging treatment for individuals after they have overdosed Yes No
D. Providing services to families after a loved one overdoses Yes No

9. To what extent do you agree or disagree with the following statements? *(Put an "X" in the box that describes how you feel)*

	Strongly Disagree	Disagree	Agree	Strongly Agree
A. All drug laws should be enforced at all times.				
B. It is the job of police officers to both protect and serve.				
C. Overdose prevention requires a proactive police response.				
D. Drug possession is a crime.				
E. Drug possession should be mainly punished through the criminal justice system.				
F. Police officers should act as "community caretakers."				
G. I wish I had more time to spend on service-related calls.				
H. I spend too much time on non-crime related calls for service.				
I. If officers act in a service capacity, it detracts from their ability to fight crime.				
J. Crime is only one of the several problems of which police should be concerned.				

10. Policing should be _____. *(Circle one)*

A. mainly focused on crime control
B. mainly service-centered
C. both focused on crime control and service

11. Assisting citizens is _____ as enforcing laws. *(Circle one)*

A. less important
B. just as important
C. more important

Part V. Preparedness for Outreach Visits

12. To what extent do you agree or disagree with the following statements? *(Put an "X" in the box that describes how you feel)*

	Strongly Disagree	Disagree	Agree	Strongly Agree
A. I understand the services available to SUDs in my area.				
B. I understand the services available to SUDs' families in my area.				
C. I understand the treatment programs available to SUDs in my area.				
D. If I do not have information for SUDs or their families, I know who to go to in my department/community to get that information.				
E. I would know what to do if I was sent on an outreach visit.				
F. I feel I have received adequate training on working with SUDs.				
G. My department has clearly stated what an officer is expected to do on outreach visits.				
H. If standing at a SUD's door, I would *not* be sure what to say to the SUD.				
I. If sent on an outreach visit, I would feel comfortable engaging with SUDs.				
J. If sent on an outreach visit, I would feel comfortable engaging with the families of SUDs.				

Part VI. Working as Part of an Outreach Team

13. I feel _____working with clinicians for overdose prevention purposes? *(Check one)*

- □ very uncomfortable
- □ uncomfortable
- □ somewhat comfortable
- □ comfortable
- □ very comfortable

14. I feel _____working with recovery coaches for overdose prevention purposes? *(Check one)*

- □ very uncomfortable
- □ uncomfortable
- □ somewhat comfortable
- □ comfortable
- □ very comfortable

15. Recovery coaches should be able to access _____ information on the SUD. *(Check one)*

□ no information □ limited information □ all information

16. To what extent do you agree or disagree with the following statements? *(Put an "X" in the box that describes how you feel)*

	Strongly Disagree	Disagree	Agree	Strongly Agree
A Recovery coaches are good role models for SUDs.				
B. Recovery coaches can help SUDs choose to enter into treatment.				
C. Recovery coaches should be able to work in the police station.				

Part VII. The Effectiveness of Overdose Outreach Programs

17. Outreach work is helping to_____in my community. *(Check all that apply)*

□ get more SUDs into treatment □ reduce the number of future overdoses □ improve the quality of life

□ save lives □ reduce crime

18. To what extent do you agree or disagree with the following statements /*(Put an "X" in the box that describes how you feel)*

	Strongly Disagree	Disagree	Agree	Strongly Agree
A. Police have the power to prevent future overdoses.				
B. Most SUDs are willing to listen to what the officer has to say during an outreach visit.				
C. The conversation the officer has with the SUD has an impact on whether the SUD chooses to enter treatment.				
D. Whether or not the SUD enters treatment following the outreach visit, the officer can be a future resource to the SUD.				
E. Officers connecting the SUD with resources and treatment opportunities is helpful to the SUD.				
F. Most families of SUDs are willing to let officers in for an outreach visit.				
G. Most SUDs are willing to let officers in for an outreach visit.				
H. Officers are making a positive difference by engaging in outreach visits.				

	Strongly Disagree	Disagree	Agree	Strongly Agree
I. Officers connecting the SUDs family members with resources is helpful to the family.				
J. Police should be able to force SUDs into treatment.				
K. Treatment is most effective when the SUD voluntarily enters.				
L. Police officers are effective agents in overdose prevention.				

Part VIII. Improvements to Overdose Outreach Programs

For questions 19-23, compare the model presented with the traditional model of outreach completed by a police officer and recovery coach or clinician. *(Check one box for each question.)*

19. A police officer going on outreach visits alone would be _____.
    □ not as effective □ just as effective □ more effective

20. A pair of police officers going on outreach visits without a recovery coach would be _____.
    □ not as effective □ just as effective □ more effective

21. A police officer going on outreach visits in uniform would be _____.
    □ not as effective □ just as effective □ more effective

22. A police officer going on outreach visits in a marked cruiser would be _____.
    □ not as effective □ just as effective □ more effective

23. A recovery coach going on outreach visits alone would be _____.
    □ not as effective □ just as effective □ more effective

24. If any, what improvements do you think could be made to the current overdose outreach programs?

_____

_____

25. If you are involved in your department's overdose outreach program, what made you want to get involved in this program?

_____

_____

Part IX. Demographic Information

26. How many years have you served as a police officer? _____

27. What is your current rank? *(Check one)*

- ☐ Officer
- ☐ Sergeant
- ☐ Lieutenant
- ☐ Captain
- ☐ Deputy Chief
- ☐ Chief
- ☐ Other

28. Are you currently, or have you ever been, a detective? *(Check one)*

- ☐ Yes
- ☐ No

29. Approximately, how many full-time sworn officers work in your department? _____

30. How old are you? *(Check one)*

- ☐ 18 – 24
- ☐ 25 – 34
- ☐ 35 – 44
- ☐ 45 – 54
- ☐ 55 or Over

31. What is your gender? *(Check one)*

- ☐ Male
- ☐ Female
- ☐ Non-Binary

32. What is your race? *(Check one)*

- ☐ Caucasian
- ☐ African American
- ☐ Hispanic
- ☐ Asian
- ☐ Other: _____

33. What is your highest level of education? *(Check one)*

- ☐ No High School Diploma
- ☐ High School Diploma or GED
- ☐ Associate Degree
- ☐ Bachelor's Degree
- ☐ Master's Degree
- ☐ Doctoral Degree

34. Are you currently serving, or have you previously served, in the military? *(Check one)*

- ☐ Yes
- ☐ No

END OF SURVEY

Thank you again for taking the time to fill this out!

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